

What is claimed is:

1. A method for calculating an Average Picture Value (APL), comprising:
  - 5       applying a first weight to a red data;  
          applying a second weight to a green data;  
          applying a third weight to a blue data; and  
          calculating the APL for the red, green and blue data  
          with the applied weights.
- 10   2. The method of claim 1, wherein the weights are  
      determined depending on the sizes of red, green and blue  
      sub-pixels, respectively.
- 15   3. The method of claim 1, wherein each of the weights has  
      different value in each red, green, blue data.
4. The method of claim 1, wherein the step of applying the  
      weight includes:
  - 20       multiplying the first weight to the red data;  
          multiplying the second weight to the green data; and  
          multiplying the third weight to the blue data.
5. The method of claim 4, wherein the step of calculating  
25   the APL includes:
  - calculating a first APL for the red data, a second  
          APL for the green data and a third APL for the blue data;  
          adding the first, the second, the third APLs for the  
30   red, the green and the blue data to produce the summation  
          therefor; and  
          calculating a mean value of the summation.

6. The method of claim 1, wherein the weights are changeable.

7. The method of claim 1, wherein the weights are  
5 changeable by users.

8. An apparatus for calculating an Average Picture Level (APL) includes:

means for applying a first, a second and a third  
10 weights to a red, a green and a blue data, respectively;  
and

an APL calculator for calculating the APL for the red,  
the green and the blue data with the applied weights.

15 9. The apparatus of claim 8, wherein the weights are determined depending on the sizes of red, green and blue sup-pixels, respectively.

10 10. The apparatus of claim 8, wherein the weights have different values in each red, green, blue data.

11. The apparatus of claim 8, wherein the means for applying the weights includes:

a first multiplier for multiplying the red data by  
25 the first weight;

a second multiplier for multiplying the green data by  
the second weight; and

a third multiplier for multiplying the blue data by  
the third weight.

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12. The apparatus of claim 11, wherein the APL calculator calculates a first APL for the red data, a second APL for the green data and a third APL for the blue data; adding

the first, second, third APLs for the red, the green and the blue data to produce the summation therefore; and calculating the mean value of the summation.

5 13. The apparatus of claim 8, wherein the weights are changeable.

14. The apparatus of claim 8, wherein the weights are changeable by users.

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15. A plasma display includes:

means for applying a first, a second and a third weights to a red, a green and a blue data, respectively;

15 an APL calculator for calculating an APL for the red data, the green data and the blue data with the applied wights; and

a driving circuit for displaying a picture using the APL.

20 16. The plasma display of claim 15, wherein the weights are determined depending on the sizes of red, green and blue sup-pixels, respectively.

25 17. The plasma display of claim 15, wherein the weights have different values in the red, green, blue data, respectively.

18. The plasma display of claim 15, wherein the means for applying weights includes:

30 a first multiplier for multiplying the red data by the first weight;

a second multiplier for multiplying the green data by the second weight; and

a third multiplier for multiplying the blue data by the third weight.

19. The plasma display of claim 18, wherein the APL calculator calculates a first APL for the red data, a  
5 second APL for the green data and a third APL for the blue data adds first, second, third APLs for the red, the green and the blue data to produce the summation therefore and calculates a mean value of the summation.

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20. The plasma display of claim 19, wherein the driving circuit differently controls the number of sustain pulses according to the mean value.

15 21. The method of claim 15, wherein the weights are changeable by users.